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# Availability of Non-Nutritious Foods in Alberta Schools

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## FOREWORD

Many of you will recall that about two years ago I wrote to all Alberta school principals, drawing attention to an article from the October, 1974, edition of Canadian Consumer entitled "Food Folly in Schools: Survey Tells Tale." The article outlined the extent of non-nutritious food available in schools in Manitoba and described the concerns of nutrition experts in that province regarding the possible effects of non-nutritious foods on children's dietary habits.

During the ensuing months, there was a steady flow of correspondence from school authorities and the general public to Alberta Education on matters relating to nutrition in schools. Many of the communications expressed concern about vending machines and the apparent availability in schools of non-nutritious foods.

In a letter dated June 21, 1976, I again wrote to local school authorities, this time to request details about the availability in schools of non-nutritious foods. School authorities in a total of 68 school jurisdictions (representing 82% of the student population of the province) responded to the request. Information provided by respondents has been analyzed by the Research and Planning Branch of Alberta Education, and conclusions drawn. A summary statement is provided for your interest on the following pages.

I believe it to be of concern that, according to recent studies by both Nutrition Canada and the Consumer Association of Canada, many Canadian school children suffer from a variety of nutrient deficiencies. I would hope that the contents of this communication will prove helpful to you in any projects that you may wish to undertake to encourage the development of sound nutrition habits in your students.

Hopefully, the results of this survey of availability of non-nutritious foods in Alberta schools will be useful to superintendents, principals and department personnel.

E. K. Hawkesworth
Deputy Minister of Education

# AVAILABILITY OF NON-NUTRITIOUS FOODS IN ALBERTA SCHOOLS

QUESTION 1. What are "junk foods"?
What are "non-nutritious" foods?

The term "junk food" is often used in reference to foods which are believed to be harmful either to health or dietary habits. However, some people take exception to use of the term "junk" because a number of food items that are usually regarded as "junk" do in fact contain some food value. In responding to Dr. Hawkesworth's letter of June 21, 1976, a number of people asked for clarification regarding the meaning of the term.

It is suggested that "junk food" can be defined as

FOOD WHICH CONTAINS MINIMAL NUTRIENTS IN PROPORTION TO NUMBER OF CALORIES.

The A.T.A. Home Economics Council has attempted to deal with this problem of definition by categorizing foods that are commonly consumed at school into four groups according to their dental and nutritional values.

The four categories are listed here in order of nutritional and dental value:

1. GOOD DENTAL AND GOOD NUTRITIONAL VALUE

   Plain milk, plain yogurt, cheese, raw fruits and vegetables, unsweetened fruit or vegetable juices, tossed salads or coleslaw, plain muffins, plain whole grain or enriched breads and cereals, crackers, hard cooked or devilled eggs, peanuts, pistachios, mixed nuts, seeds (sunflower, pumpkin, sesame), nuts and bolts, sandwiches filled with meat, poultry, fish, eggs, cheese or peanut butter, hot dogs, hamburger, pizza.

2. POOR BENTAL BUT GOOD NUTRITIONAL VALUE

   Milk puddings, milkshakes, chocolate milk, ice cream, ice cream soda, sweetened yogurt, raisins and other dried fruit, sherbet, sweetened fruits and fruit juices.

3. GOOD DENTAL BUT POOR NUTRITIONAL VALUE

   Popcorn, french fries*, potato chips, pretzels, sugar-free soft drinks, cheezies, and other similar party snacks, sugar-free gum.

4. POOR NUTRITIONAL AND POOR DENTAL VALUE

   Sugar added to beverages such as tea and coffee, regular soft drinks, honey, jams, jellies, sweet baked goods, chocolate bars, cookies, candies, regular lozenges, gum and breath mints.

*Note: French fries are difficult to categorize. They do contain a fair number of nutrients but are very high in calories. It is not recommended that they be eaten on a regular basis.

QUESTION 2. What is the extent of availability of non-nutritious foods in Alberta Schools?

(a) Elementary Schools

The results of the survey indicate that in elementary schools there is more concern with encouraging children to eat nutritious lunches provided by the home than with the sale of non-nutritious foods at school. For example, when one school system conducted a survey of discarded edible food found in classroom waste baskets, it was found that such foodstuffs were being discarded at an annual rate of more than eight (8) tons.

Summary

1. The vast majority of elementary schools either disallow or strongly discourage vending machines.
2. Pop is sold in about 10% of schools on special occasions.
3. Occasional food sales are allowed, e.g., popcorn sales for fund raising.

(b) Junior High Schools

A significant number of school principals and superintendents expressed concern about the extent and quality of foods being dispensed in junior high schools.

Summary

1. Vending machines are located in about 40% of junior high schools that responded to the survey. The majority dispense pop and other items that contain minimal nutrients in proportion to number of calories.
2. The main reasons put forward to justify installation of vending machines in junior high schools were:
   - -fund raising for Students' Union activities;
   - -to discourage students from leaving the school grounds at noon hours.
3. See also Senior High Schools, Summary.

(c) Senior High Schools

High School students are generally expected to assume greater responsibility for their personal habits, including nutrition, than are younger students. While School Boards and teachers are generally concerned about the nutrition habits of High School students, the element of greater responsibility in personal decision-making on the part of the students themselves makes for a more complex situation than exists in junior high and elementary schools.

Summary of Results

1. Soft drink vending machines have been installed in approximately three

quarters of the high schools that responded to the questionnaire. About half of the high schools operate canteens and/or additional vending machines of one kind or another.

2. Principals reported that even in schools where cafeterias exist, the cheap nutritional foods provided are sometimes by-passed for foods of lower nutritional value dispensed from vending machines. (Note: Details of types of foods dispensed were not provided in the responses, so this conclusion should be interpreted with caution.)

3. The above note withstanding, a significant number of School Boards, teaching staffs, and in a few instances, Students Unions, have taken steps to curtail, if not eliminate, the dispensing of junk foods. Respondents to the questionnaire provided several interesting anecdotes in this regard:

   -schools are noticeably tidier, and less prone to being vandalized, if vending machines are removed;

   -unilateral action by the School Board or school to outlaw consumption of non-nutritious foods is not guaranteed to be successful; students will likely react either by patronizing the local stores and cafes to buy such foods or by bringing them from home.

   -a sound education program, involving the community as well as school, can have desirable results. Several schools reported that provided that "interesting" nutritional foods are substituted, students will react positively to a changeover to sale of foods of good nutritional and dental value.

QUESTION 3. What professional services are available to assist in the development of nutrition programs and desirable nutrition habits by children?

1. NUTRITION AT SCHOOL PROGRAMS

Several Superintendents of Schools and Principals indicated that the "Nutrition At School" programs sponsored by Alberta Agriculture have been very successful in teaching elementary school children the value of good nutrition. The following description of the program was provided by Frances King, Assistant Food and Nutrition Specialist, Alberta Agriculture.

The Nutrition At School Program is a fun, practical approach to nutrition education, totally co-ordinated, supervised, and funded by Alberta Agriculture. It features nutritious snack supplements together with nutrition education integrated into the regular school curriculum. The program objectives are:

(a) to provide the elementary school child (Grades 1-6) with nutrition

information that will increase his knowledge about nutrition and thereby produce favourable attitudes toward a variety of foods and improved eating habits.

(b) to create an awareness, in parents and in the community at large, of the importance of good nutrition.

(c) to create an awareness of agricultural products and their contribution to good nutrition.

The program was initiated in 1973, partially in response to the Nutrition Canada Survey and a national report One Child One Chance, both of which stressed the need for nutrition education in the classroom. Initially eight schools and 2,000 students were involved. In 1975-76 the program had expanded to include 73 schools and 14,000 students, or seven percent of Alberta's elementary school children, and in 1976-77 a total of 91 schools and 19,000 students took part in the program.

Child-sized snacks are served regularly to the students, generally just before the morning recess. The snacks are used to expose the students to a variety of nutritious foods and to reinforce what is discussed in the classroom about nutrition and good eating habits.

Snack menus are developed with the guidance of an Alberta Agriculture home economist and include such foods as milk, cheese, yogurt, fruits, raw vegetables, nuts, breads, crackers and juices. A local person from each school community is hired by Alberta Agriculture to plan, purchase, prepare, distribute, and clean up snacks, leaving the teachers free to emphasize their nutrition teaching.

Schools apply to take part in the program and each year new schools are chosen in order to expose the maximum number of communities to good nutrition habits. Those schools that are selected must be enthusiastic about teaching nutrition and must allow teachers to attend a half day workshop presented by Alberta Agriculture home economists where teachers are given a variety of resource materials and background information. Games, stories, puppets and films help to make nutrition an appealing subject. In addition, schools must be willing to participate in the administration of the program by establishing a local advisory committee to act as a liaison between their program and the home economist.

The program has received many favourable comments from students, teachers, and parents. A recent evaluation[1] conducted by an outside evaluator suggests that children gain knowledge and develop positive attitudes towards nutrition as a result of the program.

1. Ann L. Harvey, Final Report Evaluation of the Nutrition at School Program, University of Alberta, May, 1976.

## 2. OTHER SERVICES

In addition to the Nutrition At School program, Alberta Agriculture is willing to provide nutrition education materials to elementary schools wishing to incorporate nutrition education into their present curriculum. In order to receive these materials, schools must allow half a staff development day for teaching staff to participate in a nutrition education workshop. Time permitting, District Home Economists and staff in the Food Marketing Branch who are involved in Nutrition At School programs will also provide consultative nutrition services and educational presentations on request. As an example, in schools where installation of vending machines is being contemplated, the local District Home Economist might be approached for suggestions as to "interesting" foods of sound nutritional and dental value. Schools are reminded that Public Health Nurses and Dental Hygienists employed in Health Units and Local Boards of Health can also provide schools with this type of service.